

Analysis of the Long-term Effects of Lot Size Regulations on the Age Composition in an Urban Residential Area

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Abstract

The degradation of the residential environment due to lot subdivisions has long been a problem in existing urban residential areas in Japan. In particular, in urban residential areas within metropolitan areas, the land has been sold in a piecemeal manner, primarily due to the increasing burden imposed by high inheritance taxes. In this study we construct a model that can ascertain the effects of different minimum lot size requirements on the future age composition in existing urban residential areas. Specifically, considering the districts that are expected to experience active subdivision of residential lots in the future, a model of residential lot subdivisions that accompany the inheritance of land is constructed; in accordance with the size of the subdivided lot, a model of households with different attributes moving into the area is constructed; after introducing lot size regulations with different limits into a model that integrates these two previously described models, simulations are conducted; and by inputting the population data obtained from the simulation results into a population stochastic model, the effects of lot size regulations on the future age composition in existing urban residential areas are described.

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